CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/W.No.06/KRIDL/WMM/Gradation/2014-15

08.05.2014

GRADATION FOR WMM
MORTH TABLE-400-11

Client : **Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.

Agency : **Technical Manager - 1,** KRIDL, Bangalore.

Name of Work : Improvements and Asphalting to roads and drains at Shirdi Sai Ratan and BDA Layout in Ward No.06, Hegdenagara Village Limints, BBMP, Bangalore.

Reference : AEE/BTP/(WO)/08/2014-15 Dated: 03.05.2014

Date of Testing : 08.05.2014

Material : WMM

Sample Location : WMM Mix Plant

Oven Dry Wt (gm): **25000**

Is Sieve Size in mm	Weight Retained (gm)	Cumulative Weight Retained (gm)	Cumulative % of Retained	Cumulative % of Passing	Spec.Limits
53	0	0	0	100	100
45	920	920	3.7	96.3	95-100
22.4	6145	7065	28.3	71.7	60-80
11.2	5465	12530	50.1	49.9	40-60
4.75	3980	16510	66.0	34.0	25-40
2.36	3650	20160	80.6	19.4	15-30
0.600	2120	22280	89.1	10.9	8-22
0.075	2435	24715	98.9	1.1	0-8

Note:

1. The report shall not be reproduced, except in full, without the written approval of the laboratory.
2. The results indicated above are based on the tests carried out on the samples received in the laboratory.
3. Any Query regarding the report must be reported within 15 days from the date of testing.

Civil-Tech Consultants & Engineers Bangalore

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ಸಹಾಯಕ ಅಭಿಯಂತರರು
ಬ್ಯಾಟರಾಯನಪುರ ಉಪ ವಿಭಾಗ

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
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Job No.: CTCE/BBMP/W.No.06/KRIDL/SDBC/Bitumen/2013-14 14.05.2014

BITUMEN CONTENT AND GRADATION DETERMINATION OF SEMI DENSE BITUMINOUS CONCRETE MIX

AASHTO T 164 & AASHTO T 30

CLIENT	**Asst. Executive Engineer,** Byatarayanapura Sub Division, BBMP, Bangalore.
AGENCY	**Technical Manager - 1,** KRIDL, Bangalore.
NAME OF THE WORK	Improvements and Asphalting to roads and drains at Shirdi Sai Ratan and BDA Layout in Ward No.06, Hegdenagara Village Limints, BBMP, Bangalore.
REFERENCE	AEE/BTP/(WO)/08/2014-15 Dated: 03.05.2014
SAMPLE I/D	Roads and drains at Shirdi Sai Ratan and BDA Layout in W.No.06
DATE OF TESTING	14.05.2014

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	476	477.5
3. Weight of Asphalt and Mineral matter Extracted,	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	24	22.50
7. Bitumen content in %	4.80	4.50
8. Average	**4.65**	

GRADATION AFTER EXTRACTION

SIEVE SIZE	Trail 1				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	38.96	8.18	8.18	91.82	90-100
4.75	268.5	56.41	64.59	35.41	35-51
2.36	53.63	11.27	75.86	24.14	24-39
1.18	39.74	8.35	84.21	15.79	15-30
0.3	28.25	5.93	90.14	9.86	9-19
0.075	27.96	5.87	96.02	3.98	3-8

SIEVE SIZE	Trail 2				JOBMIX
mm	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	Gradation
13.2	0	0	0	100	100
9.5	42.58	8.52	8.52	91.48	90-100
4.75	282.5	56.50	65.02	34.98	35-51
2.36	52.48	10.50	75.51	24.49	24-39
1.18	45.89	9.18	84.69	15.31	15-30
0.3	29.47	5.89	90.58	9.42	9-19
0.075	28.63	5.73	96.31	3.69	3-8

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